

Amendments to the Claims:

Claims 4, 5, 13, and 14 have been withdrawn without prejudice to the filing of one or more divisional applications. Please amend claims 1 and 10-12, as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application:

Listing of claims:

1 (currently amended). A method for testing a plasmid containing a gene encoding for an endothelial cell mitogen for the ability to produce a biologically active endothelial cell mitogen protein, wherein endothelial cells demonstrate enhanced survival in a cell survival assay in response to conditioned media from a transfection host cell line transfected with the plasmid in comparison to a host cell line transfected with a control plasmid, the method comprising:

- a. _____ transiently transfecting a transfection host cell line with a plasmid containing a gene encoding for an endothelial cell mitogen;
- b. _____ incubating endothelial cells with conditioned media from the transiently transfected transfection host cell line;
- c. determining the ability of the endothelial cells to reduce MTS to formazan;
and
- d. _____ determining the level of cell survival of the endothelial cells incubated with conditioned media from the transfection host cell line transfected with the plasmid containing a gene encoding for an endothelial cell mitogen as compared to endothelial cells incubated with conditioned media from the transfection host cell line transfected with a control plasmid;

wherein the level of cell survival of the endothelial cells is determined by the ability of the endothelial cells to reduce MTS to formazan.

2. The method of claim 1, wherein the plasmid contains a gene encoding for an endothelial cell mitogen selected from the group consisting of acidic and basic fibroblast growth factors, vascular endothelial growth factor, epidermal growth factor, transforming growth factor α and β , platelet-derived endothelial growth factor, platelet-derived growth factor, tumor necrosis factor α , hepatocyte growth factor and insulin-like growth factor.

3. The method of claim 2, wherein the plasmid contains a gene encoding for VEGF.

4 (withdrawn). The method of claim 3, wherein the plasmid contains a gene encoding for VEGF A.

5 (withdrawn). The method of claim 3, wherein the plasmid contains a gene encoding for VEGF C.

6. The method of claim 1, wherein the transfection host cell line is the Cos-1 cell line.

7. The method of claim 1, wherein the endothelial cells are HUVEC cells.

8. The method of claim 1, wherein the level of cell survival of the endothelial cells incubated with conditioned media from the transfection host cell line transfected with the plasmid containing a gene encoding for an endothelial cell mitogen is at least 25 % fold greater than the level of cell survival of the endothelial cells incubated with conditioned media from the transfection host cell line transfected with the control plasmid.

9. The method of claim 1, wherein the plasmid containing the gene encoding for the endothelial cell mitogen is tested for the ability to produce biologically active endothelial

cell mitogen protein prior to use of the plasmid containing the gene encoding for the endothelial cell mitogen in a human gene therapy treatment.

10 (currently amended). A method for evaluating the ability of a first plasmid DNA construct containing a gene encoding for an endothelial cell mitogen to produce a bioactive endothelial cell mitogen protein as compared to the ability of a second plasmid DNA construct containing a gene encoding for an endothelial cell mitogen to produce a bioactive endothelial cell mitogen protein, wherein endothelial cells demonstrate enhanced survival in a cell survival assay in response to conditioned media from a transfection host cell line transfected with the first plasmid in comparison to a transfectionn host cell line transfected with the second plasmid, the method comprising:

- a. transiently transfecting a first sample of a transfection host cell line with the first plasmid DNA construct containing a gene encoding for an endothelial cell mitogen;
- b. incubating endothelial cells with conditioned media from the transiently transfected transfection host cell line of step a; and
- c. transiently transfecting a second sample of the transfection host cell line with the second plasmid DNA construct containing a gene encoding for an endothelial cell mitogen;
- d. incubating endothelial cells with conditioned media from the transiently transfected transfection host cell line of step c;
- e. determining the ability of the endothelial cells transfected with the first plasmid to reduce MTS to formazan in comparison with the ability of the endothelial cells transfected with the second plasmid to reduce MTS to formazan; and
- f. determining the level of cell survival of the endothelial cells of step b incubated with conditioned media from the transfection host cell line transfected with the first plasmid containing a gene encoding for an endothelial cell mitogen as compared to the endothelial cells of step d incubated with conditioned media from the transfection host cell

line transfected with the second plasmid containing a gene encoding for an endothelial cell mitogen;

wherein the level of cell survival of the endothelial cells is determined by the ability of the endothelial cells transfected with the first plasmid to reduce MTS to formazan in comparison with the ability of the endothelial cells transfected with the second plasmid to reduce MTS to formazan.

11 (currently amended). The method of claim 10, wherein the first plasmid contains a gene encoding for an endothelial cell mitogen selected from the group consisting of acidic and basic fibroblast growth factors, vascular endothelial growth factor, epidermal growth factor, transforming growth factor α and β , platelet-derived endothelial growth factor, platelet-derived growth factor, tumor necrosis factor α , hepatocyte growth factor and insulin-like growth factor.

12 (currently amended). The method of claim 11, wherein the first plasmid contains a gene encoding for VEGF.

13 (withdrawn). The method of claim 12, wherein the plasmid contains a gene encoding for VEGF A.

14 (withdrawn). The method of claim 12, wherein the plasmid contains a gene encoding for VEGF C.

15. The method of claim 10, wherein the transfection host cell line is the Cos-1 cell line.

16. The method of claim 10, wherein the endothelial cells are HUVEC cells.

17. The method of claim 10, wherein the plasmids containing the gene encoding for an endothelial cell mitogen are being compared as a means for determining an optimal plasmid construct for use in a human gene therapy treatment.